

# Social Life After Hip Fracture: A Qualitative Study

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Zahra Zare, MScN, PhD<sup>1</sup>, Golnar Ghane, MScN, PhD<sup>2</sup> ,  
Hooman Shahsavari, MScN, PhD<sup>2</sup>, Shirin Ahmadnia, PhD<sup>3</sup>,  
and Shahrzad Ghiyasvandian, MScN, PhD<sup>2</sup>

## Abstract

The return to social life after a hip fracture is a major concern for patients and a determinant factor in their recovery. However, patients' perceptions of social life after hip fracture are variable and context-dependent. By identifying these perceptions and strategies of patients, interventions can be strengthened and modified. The aim of this study was to identify patients' perceptions of their social life after hip fracture. This qualitative study used inductive content analysis. Twenty patients with hip fractures who were referred to Tehran University of Medical Sciences hospitals were purposefully selected and included in the study. Data were collected through individual, face-to-face, in-depth, semi-structured interviews conducted by a researcher experienced in carrying out such interviews. The interviews were recorded, immediately transcribed verbatim, and analyzed in MAXQDA-10. The interviewing process continued until data saturation was reached. The data analysis led to the extraction of three categories: Disruption of normal social life, Minimal social life, and Social isolation. The results indicated that the social life of these patients is influenced by physical conditions and contextual factors and progresses over time. All patients experienced meaningful disruption of their social life after experiencing hip fractures and movement limitations. The interdisciplinary perspectives provided by these findings can increase awareness of patients' post-fracture social life perceptions and conditions. These findings can also be used to design future programs for interdisciplinary interventions (involving sociology and medical sciences) to improve social life and increase the ability to return to a normal social life. Recovery management for patients with hip fractures should be preventive and organized by an all-around team (involving medicine, psychology, and sociology) based on patient-centered, community-based, and modern care strategies.

## Keywords

Hip fracture, experiences, perception, social life, patient, content analysis

## Introduction

Hip fracture is one of the most common orthopedic fractures, a serious and complex injury that has a challenging and lengthy recovery process lasting a year or more. It is considered one of the 10 most important factors of morbidity, mortality, and increased health care costs. This fracture includes two types: intertrochanteric fracture and femoral neck fracture.<sup>1,2</sup> Most studies have investigated the prevalence of acute and chronic complications after hip fracture surgery.<sup>2-4</sup> These patients require long hospitalizations, complex surgeries, frequent rehabilitation courses after discharge, and long-term care to recover and restore mobility and activities. Many patients lose the ability to live independently.<sup>3</sup> At least 50% of patients require help to perform normal daily activities, and about 25%

of them are transferred to long-term care centers for continued care.<sup>2,4</sup>

After hip fracture, patients face challenges such as inability to perform normal daily activities, loss of self-care ability

<sup>1</sup> Department of Operating Room, School of Allied Medical Science, Tehran University of Medical Sciences, Tehran, Iran

<sup>2</sup> Department of Medical Surgical Nursing; School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran

<sup>3</sup> Department of Sociology, School of Social Sciences, University of Allameh Tabataba'i, Tehran, Iran

## Corresponding Author:

Golnar Ghane, Department of Medical Surgical Nursing; School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran.  
Email: golnarghane@gmail.com



and independence, poor mental function, reduced quality of life, delay in wound healing, high rate of postoperative complications due to immobility, long rehabilitation time, and a high probability of reoccurrence of fractures.<sup>5,6</sup> These challenges ultimately limit their individual social activities, role playing, and ability to return to normal and social life. In addition to movement restrictions and physical problems, social isolation prevalence is reported to be 19%, inability to perform activities is reported to be 13%.<sup>2,7</sup> For people with chronic disability and uncontrollable long-term complications, factors such as privacy, social participation, and independence are jeopardized, which ultimately weakens their social identity, social interactions, and increase social exclusion. These can lead to physical, mental, and social consequences.<sup>8,9</sup>

Some patients may not be able to communicate with the outside world during hospitalization.<sup>8,10</sup> Even after discharge, some patients lose their ability to perform their former roles.<sup>10</sup> In general, after the disease, the person's core identity as a social being becomes severely unstable.<sup>10,11</sup> Roles are never fixed in life, but they are very important for one's social existence. Lack of roles can have a profound impact on the quality of one's social life and their ability to connect with the world.<sup>12,13</sup>

After discharge, patients still require continued care and support, including home visits, clinic and care center check-ups, evaluation of the patient's life situation, planning for treatment continuation, meeting physical, psychological, and social needs, and consulting with family members and patients about necessary lifestyle modifications and complications prevention. These tasks are the responsibility of nurses.<sup>15,16</sup> However, despite the importance of post-discharge support programs, this process is not implemented in a serious and planned manner in Iran, and nursing is one of the neglected job necessities. Evidence and clinical experience of the authors suggest that people with hip fractures are discharged after surgery and initial treatment without proper follow-up from treatment staff, society, or even family members.<sup>17,18</sup> This lack of support can result in the absence of basic conditions and facilities needed for independent personal activities and rehabilitation, leading to postoperative complications and difficult conditions.<sup>5,18</sup>

Humans are social beings, and social roles are essential for social existence and health.<sup>19,20</sup> Social identity is related to the body and is displayed through it. Losing meaningful social relationships and not playing a role in society can be very destructive and have a profound impact on an individual's quality of life.<sup>5,9</sup> Debilitating and chronic diseases with long-term recovery processes can lead to the loss of social roles and endanger one's identity and social interactions, potentially leading to social isolation if ignored.<sup>19,21</sup> Social isolation deprives individuals of formal and informal participation in society, reduces social attachments, prevents the exchange of thoughts and feelings, and leads to detachment.<sup>21,22</sup> The occurrence rate of social isolation depends on factors such as the type of disease, personality characteristics, belief and

value systems, and economic, cultural, and social status of individuals.<sup>23-26</sup>

Hip fractures affect all aspects of life, including physiological, psychological, and social aspects of patients and their families.<sup>2,27,28</sup> Although physical and functional aspects have been considered more, patients may experience a sharp decline in social activity, loneliness, and social isolation.<sup>15,29,30</sup> However, their psychological and social aspects have often been overlooked, and few studies have investigated patients' participation in long-term social life and how they play their roles.<sup>5,10</sup> Despite several qualitative studies examining patients' experiences after hip fracture, no studies have specifically focused on patients' experiences with social life and relationships.<sup>14,16</sup> This study is based on the theory of symbolic interaction and aims to understand how social activities are performed in people with hip fractures. By taking into account participants' views, beliefs, opinions, and experiences, their social position and interactions with others, and the problems and conditions they face after a fracture, we can identify their perceptions of their social life conditions and provide better care to help their health. In Iran, evidence suggests that individuals with hip fracture are discharged after surgery and initial treatment without any follow-up by the healthcare providers, community, and occasionally even their families.<sup>12,30</sup> As a result, many of these patients lack family and social support and also the necessary facilities to perform their personal activities independently, and these deficiencies can lead to higher rates of postoperative complications, poor living conditions, and even social isolation. This study aims to investigate patients' experiences and perceptions of their social life after hip fracture, which has not been studied in the socio-cultural context of Iran.

## Methods

This qualitative study was conducted using interviews and inductive content analysis.<sup>31,32</sup>

## Participants

The participants included 20 patients with hip fractures who had been selected from diverse backgrounds in terms of gender, age, education, and duration of living with the condition. Interviews were conducted with people who had undergone surgery to repair a hip fracture.

The participants were selected by purposive sampling with maximum variety. Patients, who had the desire and ability to participate in the research, talk about and express their experiences and spoke Persian entered the study. Subjects have approached the patients in orthopedic clinics and wards of hospitals affiliated with the Tehran University of Medical Sciences. These hospitals are the main referral centers for patients from different cities in the country. Many orthopedic patients from different cities come to these centers for surgery.

### *The Inclusion Criteria Included the Following*

1. People with hip fracture hospitalized/with a history of hospitalization in the orthopedic departments of Tehran University of Medical Sciences hospitals in the last two years.
2. Not having underlying psychological and cognitive disorders.
3. The ability to speak and express experiences with personal feelings and perceptions.

### *Exclusion Criteria Included the Following*

1. Dissatisfaction and willingness to conduct an interview at any stage of the study.
2. Acute clinical condition of the person during the interview in such a way that the patient is not able to continue the interview.

In our study, no sample was excluded until the end of the study.

### *Data Collection*

Data collection and analysis for this study took eight months between February and October 2020. Data were collected through semi-structured individual interviews, observation, and field notes. In most cases, the first question posed to initiate the interview was “Please describe a day in your life after experiencing hip fracture,” and “Describe your living conditions and feelings after experiencing hip fracture.” Then, based on the interview guide and participants’ responses, other questions were asked, such as “Has your life changed after the fracture compared to before?”, “How are your personal, social, and occupational relationships after the fracture? Have they changed? Have you felt lonely during this time? What has caused this feeling of yours?”, “What were your most significant concerns after the fracture? Additionally, exploratory questions such as “Can you provide more details?” were used as needed during the interviews.

Interviews were conducted in a quiet place in the hospitals’ orthopedic wards and clinics, and each interview lasted between 45 and 60 min, depending on the patient’s willingness to continue. The interviews continued until no new themes emerged during the session. The first author conducted the interviews in Farsi, which were later translated into English. The interviews were recorded, immediately transcribed verbatim after each session, and analyzed in MAXQDA-10. The interviewing process continued until data saturation.

### *Data Analysis*

The data was analyzed using inductive content analysis.<sup>33</sup> The recorded interviews were transcribed and reviewed multiple times by the researcher to gain a comprehensive understanding of the data. The interview texts were then divided into meaning units, which were summarized and condensed. Each interview sentence was compared to the study objectives, and if they had an obvious or semantic relationship, they were taken as a code. The extracted codes were then compared for similarities and differences, and those with conceptual similarities were grouped into categories. These categories were named according to the meaning they conveyed. In the next step, all the categories were compared with each other, and those that were similar were combined to form larger categories. Eventually, main categories were extracted and given name.<sup>34</sup>

### *Trustworthiness*

Ensuring the trustworthiness of the study was important in all stages of the qualitative study.<sup>31</sup> The researchers had clinical experience in orthopedics, had conducted many qualitative studies, and were fully familiar with the study subject. Interviews were conducted by a nursing PhD student experienced in in-depth interviews, who had no role in caring for the participating patients. Peer checking was used to ensure the credibility of the study results, and the data was independently encoded and categorized by the authors. Disagreements about the categories were resolved through discussion until a general agreement was reached.

Member checking was also conducted, and a summary of the extracted categories was distributed among some of the participants for confirmation. Additionally, careful auditing was performed in the early stages of the study and during the data collection phase, and a person familiar with qualitative studies and content analysis who was not a member of the study team randomly reviewed and validated several of the recorded interviews.

### *Ethical Considerations*

The study was approved by the Ethics Committee of Tehran University of Medical Science (TUMS) (Number: IR.TUMS.FNM.REC.1398.217). The study objective and method were explained to the participants, and they were informed that they could withdraw from the study at any time without penalty. Informed consent was obtained from the participants, and they were assured that their answers were confidential.

### *Results*

The study aimed to explore the patients’ perceptions and experiences of their social life after hip fracture. Data were obtained from 20 individual interviews with the participants

**Table 1.** Demographic Characteristics of Study Participants.

Age	Gender	Marital Status	Education	Duration of treatment	Socio-economic status
51	Female	Divorced	Master's degree	1 Years	Good
59	Female	Widow	High school diplomas	45 Days	Moderate
34	Male	Single	Bachelor's degree	35 Days	Moderate
84	Male	Married	Bachelor's degree	14 Days	Good
79	Female	Widow	Junior school	60 Days	Moderate
43	Female	Married	Bachelor's degree	6 Months	Moderate
48	Male	Married	Bachelor's degree	4 Months	Moderate
26	Female	Single	Bachelor's degree	2 Months	Good
55	Female	Married	Bachelor's degree	1 Years and 6 Months	Moderate
60	Male	Married	Junior school	6 Months	Moderate
76	Male	Widow	Bachelor's degree	5 Months	Moderate
70	Female	Married	High school diplomas	1 Years and 4 Months	Moderate
45	Male	Married	High school diplomas	1 Years	Good
65	Male	Widow	Junior school	8 Months	Good
59	Female	Bachelor's degree	1 Years and 4 Months	Poor	
35	Male	Single	High school diplomas	9 Months	Poor
42	Male	Single	High school diplomas	7 Months	Poor
37	Female	Single	Bachelor's degree	1 Years and 5 Months	Moderate
74	Male	Widow	Junior school	1 Years	Poor
56	Female	Widow	High school diplomas	1 Years and 6 Months	Poor

**Table 2.** Category and Subcategory of Study.

Category	Subcategory
Disruption of normal social life	Personal problems after fracture
	Social consequences due to loss of physical mobility
	Consequences of loss of roles
	Social identity at risk
	Inability to manage social life problems
Maintaining minimal social life	Denied social claims
	Practical adaptation of expectations with physical abilities
Social isolation	Efforts to maintain social functioning
	Absolute anti-socialization
	People's disconnection with patients
	Preference for loneliness and silence
	Gradual isolation

which continued until data saturation. Participants' ages ranged between 26 and 79, 11 were female and nine were male, and their education level varied from illiterate to master's degree. These and other patient characteristics are shown in Table 1. The participants expressed their views and experiences. The analysis of the data led to the extraction of three categories, Disruption of meaningful social life, Minimal social life, and Social isolation (Table 2).

### *Disruption of Normal Social Life*

According to the interviews, one of the most significant problems experienced by people after a fracture is the disruption of their meaningful social life. The majority of patients realized that they had lost the meaning of their former social life,

which was gradually disrupted. The sub-categories include personal problems after the fracture, social consequences due to the loss of physical mobility, consequences of losing roles, social identity at risk, inability to manage social life problems, and denied social claims.

Most patients with hip fractures of different demographic characteristics (age, sex, and social status) referred to the loss of their normal social life after the fracture. According to the patients' statements, basic concepts such as an inactive lifestyle, painful daily life, catastrophe of simple social activities, and tedious days were formed. Some people continued to emphasize the persistence of the hardships of their social lives, despite the long time after their fractures (at least 6 months). Even a number of patients described the process of their daily lives as a disaster. Therefore, a repeated common complaint among all patients of different ages and life conditions was the problem of disrupting the usual former social life. In this regard, a young male patient (35 years old) stated about his continued disability and loss of his former social status:

"I used to have a job when I was healthy, and I could work and have a good social status, but now I'm a burden on my dad's shoulders, and there's nothing I can actually do, and my life is already limited, hard, and painful. It's a tragedy for me that I can only move with a lot of pain and difficulty for simple everyday tasks like going to the bathroom, moving with a walker, and worse is that I don't know how long it lasts."

One year later, a 56-year-old woman suffered a fracture due to her inability to return to a normal life and is alone. She cannot do her usual activities:

“What can I do? Well, I can’t go anywhere alone. I can’t buy anything in the outside market. I can’t even cook alone or do housework. Maybe I’ll be busy and my mood will improve. Neither physically nor mentally, I feel that I can’t do anything, that’s why I fell in the corner of the house and I keep sleeping all day, I’m alone at home, my daughter and my husband come in the evening and they are both tired, I eat dinner with them and then they go to sleep. My daughter has no time for me anymore.

**Social Consequences of Loss of Physical Mobility.** One of the most significant problems in people with hip fractures was the long-term movement limitation and loss of physical mobility, which had different physical, psychological, and social consequences according to their life conditions. The loss of job conditions, loss of professional roles with movement disability, loss of active social presence, the impossibility of attending public gatherings, the impossibility of being in the workspace, absence of attendance in public with movement aids, and limited presence in the public arena (public space) are among the social consequences of losing physical mobility. Most of these patients with movement disabilities had a poor and imperfect perception of themselves and limited their social connections and active presence in friends, family, and public gatherings. A young patient stated:

“I’ve been involved in this for three months now, and I haven’t been able to go to work. I don’t know whether they’ll renew my contract again next year or not, but I’m really worried. If I can’t go to work, I’ll be destroyed. In the three months that I didn’t go to work, I lost touch with everyone. I mean I wasn’t in the mood for relationships. I kind of walked away from colleagues and even people outside the workplace, so they lost touch too. I was forgotten.”

What was evident in the interviews was the concern for the continuation of the job in younger people, and one of their main concerns was the disturbance in their occupational status and social communication following fractures and disabilities. Although older patients had fewer occupational and economic concerns, they were more concerned about loneliness and the inability to perform personal activities. Therefore, the pre-fractured positions and roles of individuals are important factors for these concerns. Most of the young and elderly patients, except for a few cases with excellent economic status, had concerns about the imposition of the financial burden on the family according to the job status and medical costs. A patient concerned about their disability states:

“A month ago, I was perfectly on my own and a successful tailor. But now, I’m miserable and crippled, unable to do even simple personal activities such as taking a bath or going to the restroom, let alone going to work. With this

walker, I don’t think I can ever lead a successful life like before”.

In most interviews, patients were reluctant to communicate with the outside world, such as friends, colleagues, family, and public gatherings, and had completely restricted their relationships. According to the contextual conditions, the subjects had different reasons for avoiding public gatherings, but most patients emphasized feeling incomplete, their imperfections, and lack of consideration for their movement disabilities from others. One of the patients stated:

“It’s really hard for me to walk a long way with the walker. I get very tired outside, so I prefer to stay inside. I find it embarrassing to walk with a walker outside. People start asking questions, and I have to explain to everyone about my situation. It’s annoying” (men, 60 years old).

The meaning of social life is quite different for people with different contextual conditions, but what is important was that patients’ perspectives changed after a hip fracture. Four months after the fracture, a 35-year-old male patient talked about the reduction of the significance of his social life due to his inability to continue his former job, saying:

“This fracture had a very bad impact on me, and it really distanced me from my job, my family, and my friends. I haven’t had any special activities during this time, no work, no entertainment, and I have lost touch with my friends and colleagues for a long time. They don’t ask after me, and I’m even lonelier.”

**Social Identity at Risk.** Some younger patients were breadwinners and supporters of their families before the fracture, but playing this role was impossible after the accident. In addition, by realizing their complete physical dependence on others, they saw themselves as physically disabled and a burden on their families. All patients, whether elderly or younger, felt that they were not acceptable among their families, relatives, and colleagues due to their continued inability to play their former roles in a way that their social identity was at risk. One of the patients in relation to disability in foster care and family support said:

“Well, I’m a father and the breadwinner of the family, but ever since I had this accident, I have been a burden on my family rather than a supporter. It’s been a few months that I have not gone to work without any other source of income. My family cannot afford my expenses, and I feel useless and think nobody cares about me anymore.”

Most patients with hip fractures, after discharge due to movement limitations and subsequently their dependence on others, have become isolated and incapable of doing their former social activities, hobbies, and recreations. This

has even affected their interactions with friends, colleagues, and neighbors. One of the patients said:

“I’ve been in therapy for a few months, and I’ve lost touch with friends and colleagues. I mean, I was mentally and physically bored, and they didn’t ask after me either. I didn’t have any fun. My life has become monotonous with boring routines. It’s all sleeping. I’m bored.”

**Social Unfulfilled Social Demands.** Most of the patients in this study referred to the negligence of their social demands and needs as patients by those around them and the community. Unfortunately, during the treatment process after hip fracture, only the physical needs of the patients had been taken into consideration, and other aspects were completely neglected. The patients who participated in this study emphasized that their social needs and demands were not only neglected by the healthcare system and hospital during hospitalization but also completely ignored after discharge by family members and the social environment.

A woman who suffered a hip fracture a year ago and underwent a long-term treatment process has undergone hip replacement surgery. She believes that she has been completely forgotten by her family, friends, and colleagues:

“After this fracture, everyone shuns me so much that I don’t want to hear from them anymore. It was hard for them to take me out with walkers and crutches and help me, so they don’t invite me to any parties or gatherings at all.”

Most patients with a pessimistic view thought that people in society had become indifferent to each other’s pain and suffering. There isn’t even an association to support and help them return to society. Another patient with 65 years old stated:

“When you can’t go to work and you’re at home, that means you have no place in society. Naturally, everyone ignores you, not even your colleagues or your boss supports you. When you have no efficiency or function, you are forgotten, and there are no support or facilities by which you can return to society.”

### **Maintaining Minimal Social Life**

Social life consists of at least two sub-categories: practical adaptation of expectations with physical abilities and efforts to maintain social functioning. Several patients had reached a new kind of acceptance of life and social conditions after their initial efforts to save their lives from the many problems after a hip fracture. Some patients adapted their expectations to physical abilities after fractures and tried to maintain their social function despite all limitations. Of course, in order to maintain a minimal social life, all contextual determinants should be controlled because patients may move towards social isolation as the situation deteriorates very quickly.

**Practical Adaptation of Expectations with Physical Abilities.** A number of patients, especially the older ones, had practically adapted their lives to physical limitations after fractures in such a way that due to more limited activities in the pre-fracture period, they could adapt to their new physical limitations and movement aids like walkers and crutches more easily than younger patients during daily activities and avoided doing hard activities alone. Also, some patients had accepted the impossibility of returning to their former abilities. A 65-year-old male patient who could walk with a walker after 8 months stated:

“I don’t really know how you get along, but I suffered so much that I’m satisfied with this situation right now. I think I’m never going back to my former abilities and life. It’s like a new stage has begun in my life, and I’m trying to think less about the past and practice using crutches more to try to stand on my own. From now on, I will work as much as I can and do less hard work.”

**Efforts to Maintain Social Functioning.** A number of patients, especially family supporters and younger people at different stages of fracture, were trying to keep their jobs and were somehow searching for job security so that they would not lose their jobs due to their disabilities. They also tried to establish social connections in accordance with their limitations so that they could maintain minimal social relations and participate in social events in accordance with their circumstances. In this way, they communicated virtually and in person with their neighbors and friends so that they would not be put off by physical limitations following a fracture and maintain minimal social relations. Therefore, most of these people sought to maintain social activities after the acute stage of fracture. One patient said:

“I was very active at home as well as at work, and now it’s been 4 months that I am dealing with a fracture. I can walk with a walker now, but I can’t go to work. So, I started working from home. I really want to continue my work, otherwise, I get worse. I keep telling my wife to help me get out to keep in touch with the neighbors and people outside, and I don’t really like spending my time in bed to recover.”

Some patients had experienced compulsory and optional reductions in their communication and social activities during their treatment process. However, a number of patients who had achieved minimal social life through efforts had less isolationism and loneliness and continued a minimal flexible life.

### **Social Isolation**

Social isolation is a complex issue that can result in physical, psychological, social, and economic problems for patients. Effective communication requires reciprocal feedback from both parties, and when feedback is lacking, communication

can be disrupted. In this study, many patients experienced reluctance to communicate due to physical limitations, while others did not receive feedback from those around them, leading to disrupted interactions.

Social isolation can manifest in various ways, including disconnection from others, a preference for loneliness and silence, and gradual isolation. Contextual factors also play a significant role in patient isolation. Patients may reach a point of complete disconnection and anti-socialization by rejecting support and ignoring concerns from those around them. This can lead to lost contact with family and friends, and eventually, a preference for loneliness and isolation.

Some patients may struggle with anti-socialization by accepting their inability to engage in their former social roles, which can lead to avoidance of group gatherings. For example, one patient shared that they distanced themselves from others after losing their social identity due to their physical and mental condition.

“I lost my identity and social status after this incident, so I distanced myself from everyone. However, due to my physical and mental conditions, I did not like to be seen in public, and whenever my mother tried to take me to a family gathering or a party, I resisted. I haven’t seen or talked to my colleagues and friends in a long time, because no one understands me, and I’ve let go of all the gatherings and even virtual groups.”

Another patient attributed their isolation to rejection by their family.

“Since my family has abandoned me, I don’t expect anything from others anymore and all I do is sleep.”

## Discussion

The study found three main categories of patient experiences: disruption of meaningful social life, minimal social life, and social isolation. Patients with continued movement limitations resulting from fractures experienced personal and social problems that disrupted their social life and threatened their identity.

According to a review study on long-term complications of hip fractures, survivors of this type of fracture experience deterioration in movement, independence, health, self-care, social participation, and quality of life, indicating a disturbance in their normal and social life.<sup>18</sup> Unmet needs, feelings of idleness and inefficiency, and a perception of lagging behind in social life contributed to negative mentalities about their abilities, which can affect their social performances.<sup>7,29</sup>

Most patients after a long period of fracture still have physical dependence and an inability to play their roles in life which can be one of the threatening factors in their social life.<sup>35</sup> Also, the disruption of job conditions and the inability to attend social gatherings with movement aids make them shun society completely.<sup>36</sup> By examining the

patients’ experiences of fractures, Tutton et al mentioned the point of trying to maintain relationships to attract the support and help of those around them, which most patients experienced to maintain their social life.<sup>37</sup>

One of the important dimensions of disruption in the normal social life of these patients is jeopardizing the individual’s independence and privacy. Human beings are independent individuals on one hand and on the other hand, are considered social beings because of their relationships and interactions with others, therefore, they have a dual identity.<sup>1</sup> Privacy and respect for the privacy of individuals are moral principles and common values.<sup>38,39</sup>

Normally, due to the nature of the disease and the continuous dependence and movement limitations of patients with fractures, their privacy is in jeopardy and since the relationship between medical staff and patients is also in the domain of human social life, patients’ privacy and respect for it is important in this regard. Privacy is discussed at different levels and dimensions in the relationship between the patient and the medical staff. Paying attention to different aspects of patients’ privacy and ethical relationship with them can be helpful in improving their social life status. However, most patients complained about the violation of their privacy by the medical staff, their family caregivers, and non-family caregivers.<sup>3,39</sup>

Most of the studies that have been conducted on patients with hip fractures have emphasized the patients’ dependence on doing the smallest personal tasks. However, the effects and consequences of these limitations on their mental lives were not investigated.<sup>40</sup> Of course, the way the needs of the dependent patients are met by those around them will have an impact on the type of its consequences. Also, the patient’s dependence is related to their ability to return to the level of daily activities.<sup>41,42</sup>

One of the challenges of over-dependence on others is that if one does not gain the appropriate attention and affection from those around them, in addition to having a feeling of unfulfilled social demands, they begin to have irrational doubts about their value to others, which has a negative impact on one’s emotions and perceptions, especially self-esteem.<sup>28,41,43,44</sup> In a qualitative study with a phenomenology approach, Olsen et al included patients’ experiences in three main themes: “feeling of vulnerability,” “gap between self-reliance and dependency,” and “disruption in normal life.”<sup>11</sup> In this study, patients stated that they felt constant sadness and vulnerability during the long-term treatment process. They had experienced a lot of stress between dependency and relative independence. Finally, they achieved limited and disrupted social life with a loss of normal movement ability.<sup>11</sup> The results of this study indicated the threat to individual and social identity following the feeling of loss of independence, inability to continue the former supportive roles, and a decrease in acceptability in personal and social relationships which exacerbated the disruption of patients’ meaningful social life. Tewari et al stated that understanding the patients with hip fractures,

their independence and self-care can affect the improvement of their personal and social identity and care-related programs are necessary for them to gain their independence.<sup>36</sup> In a qualitative study, Gesar et al emphasized the need to maintain independence, self-confidence, self-esteem, and meaningful life for understanding the recovery of the patients.<sup>8</sup>

### *Minimal Social Life*

In the present study, some patients had adapted to their physical limitations by accepting the impossibility of returning to their former lives. They limited their daily obsessions and avoided strenuous activities to achieve a minimal social life. These patients made effective efforts to improve their situation and reached a level of social functioning with minimal dependence on others. Balancing rest and activity was crucial for these patients, and they had to plan their daily activities to maintain energy while adhering to the principles of care and proper movement. Failure to do so could result in unpleasant complications and exacerbation of disabilities.<sup>9,11,17</sup>

Another study reported that the recovery rate of these patients is unknown, but they should be able to adapt to a more limited and slower lifestyle without worrying.<sup>8,9</sup> This finding is consistent with the concept of minimal social life in the present study, where some patients, particularly the elderly, accepted their limitations and continued living with limited abilities during the early stages of recovery. Maintaining social functioning is an important aspect of a minimal social life.<sup>22</sup> Some patients continued to interact socially, participate in activities, and engage in their occupations to maintain minimal social relations. Family and the supportive environment played a significant role in achieving social life, along with contextual factors such as patients' sociable personalities before the fracture and their former social status.<sup>18,42-44</sup>

In the present study, patients' main concern was the disruption of their meaningful social life. Some patients achieved a limited social life by compromising their expectations and finding satisfaction and adaptation. In another study by Healee et al, patients' main concern was their ability to return to their usual physical, social, and psychological activities. They defined recovery as a minimal and relative improvement in physical and social performance, while some patients had not resumed their usual psychosocial behaviors.<sup>14</sup> The characteristics and concepts of the relative recovery process in this study were closely related to the minimal social life achieved by some patients in this study. The most important common feature was the adaptation to minimum empowerment and normalization of the restricted social life by some patients with better socio-economic conditions.

During the treatment process, individuals had to change their roles from active family members to patients and from supportive to supported individuals. These roles were often influenced by the context and modeled on the perceived

roles of patients. However, acceptance of the role change by the patients and those around them played a crucial role in achieving minimal social life.<sup>6,14</sup> In the present study, patients sought security for continuing their jobs and changing their forced roles after movement limitations. Unfortunately, most patients did not achieve this security and acceptance of role changes by themselves and those around them. Therefore, understanding access to minimal social life is a fragile stage, and with the slightest uncertainty and exacerbation of patients' conditions, it may lead to social isolation strategies.

The strategies used by people in different critical situations such as diseases are dependent on culture and environment. In Iranian Islamic society, the role of culture in dealing with fracture and its management and the social life of people after experiencing hip fracture cannot be ignored. In this way, people with religious beliefs sought to alleviate their conditions. In some other studies, the experiences and strategies of patients in different cultures have been mentioned.<sup>14,25,36</sup>

### **Conclusion**

In this study, patient's perceptions of their social life after hip fracture were depicted. The results of this study indicated that the social life of these patients is processing, developing and progressive and dependent on physical conditions and contextual factors.

All patients experienced disruptions in their normal social lives after suffering hip fractures and movement limitations. Some patients adapted to their physical conditions and limitations and were able to achieve minimal social engagement while continuing their social activities and roles within these limitations. However, achieving and maintaining a minimal social life depended completely on the patients' perceptions of their contextual conditions and recovery. At this stage, patients are in a very unstable condition as they try to adapt. Interestingly, older people found it easier to accept these limited social conditions and had better compliance with their life limits after fractures, while younger and more active patients were not as resistant to post-fracture restrictions and tended to withdraw from social interactions. Therefore, contextual factors and personal characteristics play a crucial role in patients' post-fracture social lives.

The interdisciplinary findings presented here can be used to increase awareness of patients' perceptions of their post-fracture social life conditions and to design future programs that develop and evaluate interdisciplinary interventions in sociology and medical sciences. These programs aim to improve social life and increase patients' ability to return to a normal social life. Recovery management and returning to a minimal social life of patients with hip fractures should be done preventively and organized by a multidisciplinary team that includes medicine, psychology, and sociology based on patient-centered, community-based, and modern care strategies. In every culture and society, it is possible to plan interventions by knowing the perceptions of



patients to improve their mental and social condition after experiencing a hip fracture.

### Limitations

Our study had several limitations. One of the limitations of qualitative studies is the dependence of the research findings on various conditions, particularly time and location,<sup>45,46</sup> and this study is no exception to this rule. The sampling of this study was during the covid-19 epidemic and the restrictions created after this epidemic as well as its effect on the process of treatment and care of patients may have been effective in some aspects of the lives of patients with hip fracture, especially psychological and social aspects.<sup>45,46</sup> Also, in all the interviews, the effort was to follow the health protocols so as not to threaten the patients during the interview sessions.

The challenge raised by the patients was the concern about revealing their statements and speech to family members and others. The researcher tried to keep the peace of the participants by assuring them and stating the purpose of the research and maintaining confidentiality. Another challenge was the rapid fatigue of the patients during the interviews, which was tried to be conducted in several times in elderly people who get tired earlier.

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### Availability of Data and Materials

The datasets used during the current study are available from the corresponding author on reasonable request.

### Author Contributions

Golnar Ghane: conceptualization, methodology, formal analysis, investigation, writing—original draft, writing—review & editing, and visualization. Zahra Zare: investigation, writing—original draft, writing—review & editing, visualization, and validation. Hooman Shahsavari: supervision, conceptualization, methodology, investigation, resources, writing—review & editing, and funding acquisition. Shirin Ahmadnia: investigation, resources, writing—review & editing, and validation. Shahrzad Ghiyasvandian: investigation and review & editing.

### Consent for Publication

Informed consent was obtained from participants. They were also assured that their answers were confidential.

### Declaration of Conflicting Interests

All authors agree with the review process and article publication, and there is no conflict of interest.

### Declaration of Competing Interest

The authors declare that they have no competing interests.

### Ethics Approval

This research project has been approved by a research ethics committee of the Tehran University of Medical Science (TUMS) (Number: IR.TUMS.FNM.REC.1398.217). This article is part of the Corresponding author's PhD Thesis.

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### ORCID iD

Golnar Ghane  <https://orcid.org/0000-0002-8563-8796>

### References

1. von Friesendorff M, McGuigan FE, Wizert A, et al. Hip fracture, mortality risk, and cause of death over two decades. *Osteoporos Int*. 2016;27(10):2945-53.
2. Kanis JA, Odén A, McCloskey EV, Johansson H, Wahl DA, Cooper C. A systematic review of hip fracture incidence and probability of fracture worldwide. *Osteoporos Int*. 2012;23(9):2239-56.
3. Murthy S, Clapp JT, Burson RC, Fleisher LA, Neuman MD. Hip fracture care pathways and goals of care discussions: A qualitative study. *Hip*. 2017;1102(43029):4375-5.
4. Landeiro F, Leal J, Gray AM. The impact of social isolation on delayed hospital discharges of older hip fracture patients and associated costs. *Osteoporos Int*. 2016;27(2):737-45.
5. Murthy S, Clapp JT, Burson RC, Fleisher LA, Neuman MD. Physicians' perspectives of prognosis and goals of care discussions after hip fracture. *J Am Geriatr Soc*. 2022; 70(5): 1487-94.
6. Young Y, Resnick B. Don't worry, be positive: improving functional recovery 1 year after hip fracture. *Rehabil Nurs*. 2009;34(3):110-7.
7. Flikweert ER, Wendt KW, Diercks RL, et al. Complications after hip fracture surgery: Are they preventable? *Eur J Trauma Emerg Surg*. 2018;44(4):573-80.
8. Gesar B, Baath C, Hedin H, Hommel A. Hip fracture; an interruption that has consequences four months later. A qualitative study. *Int J Orthop Trauma Nurs*. 2017;26(1):43-8.
9. McMillan L, Booth J, Currie K, Howe T. A grounded theory of taking control after fall-induced hip fracture. *Disabil Rehabil*. 2012;34(26):2234-41.
10. Smith TO, Dainty JR, MacGregor A. Trajectory of social isolation following hip fracture: an analysis of the English longitudinal study of ageing (ELSA) cohort. *Age Ageing*. 2018;47(1): 107-12.
11. Bruun-Olsen V, Bergland A, Heiberg KE. “I struggle to count my blessings”: recovery after hip fracture from the patients' perspective. *BMC Geriatr*. 2018;18(1):1-9.
12. Ghane G, Farahani M, Seyedfatem N, Haghani H. Effect of problem-focused coping strategies on the quality of life in family caregivers of hemodialysis patients. *Koomesh*. 2017;19(2):391-400.

13. Lu J, Zhang N, Mao D, Wang Y, Wang X. How social isolation and loneliness effect medication adherence among elderly with chronic diseases: an integrated theory and validated cross-sectional study. *Arch Gerontol Geriatr.* 2020;90(3):104154.
14. Healee DJ, McCallin A, Jones M. Restoring: how older adults manage their recovery from hip fracture. *Int J Orthop Trauma Nurs.* 2017;26(3):30-5.
15. Ohrnberger J, Fichera E, Sutton M. The relationship between physical and mental health: a mediation analysis. *Soc Sci Med.* 2017;195(4):42-9.
16. Papadimitriou N, Tsilidis KK, Orfanos P, et al. Burden of hip fracture using disability-adjusted life-years: a pooled analysis of prospective cohorts in the CHANCES consortium. *Lancet Public Health.* 2017;2(5):e239-e46.
17. Meehan A, Maher A, Brent L, et al. The international collaboration of orthopaedic nursing (ICON): best practice nursing care standards for older adults with fragility hip fracture. *Int J Orthop Trauma Nurs.* 2018;11.001(18):301-28.
18. Dyer SM, Crotty M, Fairhall N, et al. A critical review of the long-term disability outcomes following hip fracture. *BMC Geriatr.* 2016;16(1):158.
19. Králová J. What is social death? *Contemp Soc Sci.* 2015;10(3):235-48.
20. Steele C, Kidd DC, Castano E. On social death: ostracism and the accessibility of death thoughts. *Death Stud.* 2015;39(1):19-23.
21. Sweeting HN, Gilhooly ML. Doctor, am I dead? A review of social death in modern societies. *Omega.* 1992;24(4):251-69.
22. Scheepers D, Ellemers N. *Social identity theory. Social psychology in action.* Springer; 2019, p. 129-43.
23. Auais M, Al-Zoubi F, Matheson A, Brown K, Magaziner J, French SD. Understanding the role of social factors in recovery after hip fractures: A structured scoping review. *Health Soc Care Community.* 2019;27(6):1375-87.
24. Králová J, Walter T. *Social death: questioning the life-death boundary.* Routledge; 2018.
25. Shen MH, Yang CT, Wu CC, et al. Resuming normal life as a family caregiver during drip-like recovery of older persons with cognitive impairment recovering from hip surgery: A grounded theory. *J Nurs Scholarsh.* 2020;52(3):250-60.
26. Shawler C. The empowerment of older mothers and daughters: rehabilitation strategies following a hip fracture. *Geriatr Nurs.* 2006;27(6):371-7.
27. Petit MP, Bryère J, Maravic M, Pallaro F, Marcelli C. Hip fracture incidence and social deprivation: results from a French ecological study. *Osteoporos Int.* 2017;28(7):2045-51.
28. Alexiou KI, Roushias A, Varitimidis SE, Malizos KN. Quality of life and psychological consequences in elderly patients after a hip fracture: a review. *Clin Interv Aging.* 2018;13(1):143-50.
29. Farrow L, Hall A, Wood AD, et al. Quality of care in hip fracture patients: the relationship between adherence to national standards and improved outcomes. *JBJS.* 2018;100(9):751-7.
30. Sheehan K, Sobolev B, Chudyk A, Stephens T, Guy P. Patient and system factors of mortality after hip fracture: a scoping review. *BMC Musculoskelet Disord.* 2016;17(1):166.
31. Elo S, Kääriäinen M, Kanste O, Pölkki T, Utriainen K, Kyngäs H. Qualitative content analysis: A focus on trustworthiness. *Sage Open.* 2014;4(1):2158244014522633.
32. Kyngäs H. *Qualitative research and content analysis. The application of content analysis in nursing science research.* Springer; 2020, p. 3-11.
33. Vaismoradi M, Turunen H. Terese bondas 'content analysis and thematic analysis: implications for conducting a qualitative descriptive study. *Nurs Health Sci.* 2013;15(3): 398-405.
34. Mayring P. *Qualitative content analysis: theoretical foundation, basic procedures and software solution.* Social Science Open Access Repository. SSOAR. 2014.
35. Taylor NF, Harding KE, Dowling J, Harrison G. Discharge planning for patients receiving rehabilitation after hip fracture: A qualitative analysis of physiotherapists' perceptions. *Disabil Rehabil.* 2010;32(6):492-9.
36. Tewari A, Pati S, Nallala S, Webster P, Rath S. Care seeking behaviour of older adults with hip fracture in India: a qualitative study. *J Patient Care.* 2017;3(01):128.
37. Tutton E, Saletti-Cuesta L, Langstaff D, Wright J, Grant R, Willett K. Patient and informal carer experience of hip fracture: a qualitative study using interviews and observation in acute orthopaedic trauma. *BMJ Open.* 2021;11(2):e042040.
38. Allsop S, Morphet J, Lee S, Cook O. Exploring the roles of advanced practice nurses in the care of patients following fragility hip fracture: a systematic review. *J Adv Nurs.* 2021;77(5):2166-84.
39. Raghuvanshi A, Singh UK, Joshi C. A review of various security and privacy innovations for IoT applications in healthcare. In: *Advanced healthcare systems: empowering physicians with IoT-enabled technologies.* Scrivener Publishing LLC; 2022, p. 43-58.
40. Landeiro F, Leal J, Gray AM. The impact of social isolation on delayed hospital discharges of older hip fracture patients and associated costs. *Osteoporos Int.* 2016;27(2):737-45.
41. Ghane G, Shahsavari H, Zare Z, Ahmadnia S, Siavashi B. Social death in patients: concept analysis with an evolutionary approach. *SSM Popul Health.* 2021;14(2):100795.
42. Ariza-Vega P, Prieto-Moreno R, Castillo-Pérez H, Martínez-Ruiz V, Romero-Ayuso D, Ashe MC. Family Caregivers' experiences with tele-rehabilitation for older adults with hip fracture. *J Clin Med.* 2021;10(24):5850.
43. Shahsavari H, Ghane G, Ghiyasvandian S, Zakerimoghadam M, Najafi F. Psychometric properties of the Persian version of the quality of recovery-15 questionnaire. *Journal of Patient- Reported Outcomes.* 2021;5(108):1-11.
44. Ghane G, Zare Z, Shahsavari H, Ahmadnia S, Siavashi B. The process of social death in patients with hip fracture. *Scientific Reports* 2024;14(1):1707.
45. Powis M, Sutradhar R, Hack S, et al. Patient perceptions of the impact of the COVID pandemic on the quality of their gastrointestinal cancer care. *J Patient Exp.* 2023;10(12):23743735231223849.
46. Kyle MA, Blendon RJ, Findling MG, Benson JM. Telehealth use and satisfaction among US households: results of a national survey. *J Patient Exp.* 2021;8(10):23743735211052737.